

**INITIALIZATION SCHEME FOR A HYBRID  
FREQUENCY-TIME DOMAIN EQUALIZER**

**ABSTRACT OF THE DISCLOSURE**

This invention provides a method for initializing the filter coefficients of a hybrid frequency-time domain adaptive equalizer device implementing frequency domain (FD) filter equalization in a forward path and a time domain (TD) filter equalization in a feedback path, with each filter unit having a plurality of adaptable filter taps. Preferably, in initializing the equalizer, the relation  $\frac{1 + F}{G} = H$  is obeyed where G is the forward FD equalizer taps, F is the Fast Fourier Transform of the feedback TD equalizer taps, and H is the estimated (frequency domain) response of the communications channel.